LPELC Educational Webinar Series

Use of Vermifiltration as a Tool for Manure Management

MAY 20, 2022

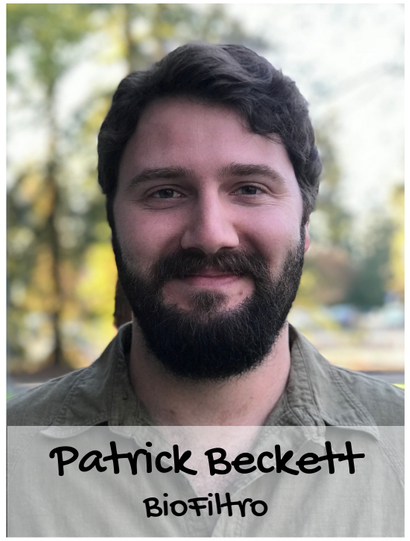
2:30 PM ET, 1:30 PM CT,
12:30 PM MT, 11:30 AM PT

Can earthworms be the most recent addition to the manure manager's toolbox? Does this approach to manure management bring with it the possibility of carbon credits? Come join us to hear about the **science and economics behind the use of worms** in the processes of composting (i.e., vermicomposting) and treatment of wastewater and manure liquid waste stream (vermifiltration). The benefits you will hear about are: ammonia and greenhouse gases (GHG) **emissions reduction**, reduction of nutrient and organic loads in the liquid waste stream, and generation of a valuable soil amendment product and carbon credits.

An application for continuing education credit for Certified Crop Advisors (CCAs) and members of the American Registry of Professional Animal Scientists (ARPAS) will be submitted.

More Information on the Topic

- A vermifiltration system for low methane emissions and high nutrient removal at a California dairy https://www.sciencedirect.com/science/article/pii/S2589014X22001013
- Company website https://biofiltro.com/



Patrick Beckett is the VP of Product Development and Quality Assurance at BioFiltro. Patrick has a B.S. in Physics and Mathematics (Missouri Southern State University), an M.S. in Chemical Engineering and Environmental Engineering and certification in Industrial Ecology (University of California, Davis). He has **academic and industrial R&D and quality control experience** in electrochemistry, nanomaterial synthesis and characterization, catalysis, and environmental biotechnology.
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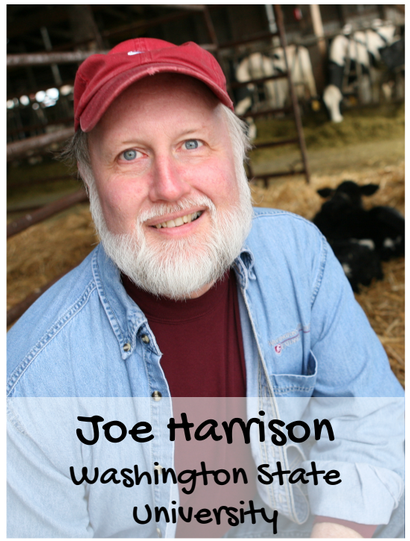
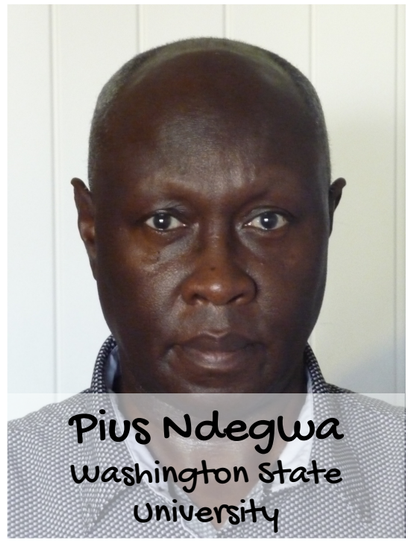


Dr. Joe Harrison led the Livestock Nutrient Management Research and Outreach Program at WSU Puyallup Research and Extension Center. Dr Harrison has developed expertise in the area of whole-farm nutrient management, integrating animal nutrition, agronomy-crops-soils, engineering, and economics. His research focuses on precision ration balancing to reduce nitrogen import to dairy farms, extracting manure phosphorus, and reducing manure application impacts on groundwater quality. Dr. Harrison will serve as the **moderator for this webinar**.
Email: jhharrison@wsu.edu



Pius Ndegwa is Professor of Biological Systems Engineering at Washington State University. His broad research interests are in **assessments and development of sustainable animal waste management systems**, more specifically: solids-liquid separation for nutrient management and mitigation of air emissions, aerobic and anaerobic digesters for nutrient management, bio-energy production, and mitigations of air emissions, **bioconversion of manure through microbial composting and vermicomposting**, lab and field evaluation (characterization and quantification) of air emissions from livestock operations, and bio-systems modeling.
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Gllbert Miito Gilbert is a Postdoctoral fellow at University of Missouri. He received his PhD from Washington State University. His research **focuses on design, analysis and monitoring of manure management systems**. Gilbert has expertise in composting, vermicompost, vermifiltration and anaerobic digestion.
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How do I participate?

If it is your first time joining us for the LPELC webinar series, follow the steps at: lpelc.org/how-do-i-participate-in-a-webcast/

If you are a returning viewer, go to lpelc.org/live to download presentations and connect live.

Livestock and Poultry Environmental Learning Community

The LPELC is a project dedicated to the vision that individuals involved in public policy issues, animal production, and delivery of technical services for confined animals systems should have on-demand access to the nation's best science-based resources. See our website at: lpelc.org

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